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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,637	01/13/2004	Daniel Kwoh	50843/WWM/E327	4667

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CHRISTIE, PARKER & HALE, LLP
PO BOX 7068
PASADENA, CA 91109-7068

EXAMINER

NELSON, FREDA ANN

ART UNIT	PAPER NUMBER
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3639

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/757,637

Applicant(s)

KWOH, DANIEL

Examiner

Freda A. Nelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 10-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This is in response to the applicant's communication filed on December 30, 2005, wherein claims 1-6, 10-18, and 20-23 are currently pending.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Response to Amendment and Arguments

Applicant's arguments with respect to claims 1-6 and 10-15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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1. Claims 1-2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaehn et al. (US PG Pub 2003/0125994) in view of Tuzhilin et al. (US PG Pub. 2004/0103092), in further view of Chappell (US PG Pub. 2002/0174005).

As for claim 1, Jaehn et al. disclose a method for rating a cruise based on pricing data for one or more cruises for a predetermined period of time comprising: electronically obtaining pricing data for one or more cruises (paragraph [0002]); and identifying one or more price affecting factors (paragraph [0007]).

Jaehn et al. do not disclose calculating, using a processor, one or more correlation coefficients for each of the one more price affecting factors; and calculating a cruise rating based on the pricing data, the one or more price affecting factors, and the one or more correlation coefficients. Tuzhilin et al. disclose that certain customer's preferences for vacation packages may be dependent on the current time of the year or the time of the year that the vacation package is being offered because such a customer may prefer to vacation in the Caribbean in the winter, but not in the summer, or that the Caribbean vacation is only being offered at a low rate in the summer (paragraph 0006); FIG. 4 is an exemplary diagram in which content-based and collaborative-filtering approaches are both used by the system and method of the present invention for providing recommendations/suggestions and to calculate/estimate ratings (paragraph 0026); and when utilized for the users/items example, the collaborative technique can fill-in a ratings diagram 250 (i.e., users vs. items matrix) by estimating a rating $r(u, i)$ which can preferably be performed by locating n users $[u.sub.j]$ who are "similar" to users $[u]$, and by estimating rating $r(u, i)$ as a function $f(r(u.sub.1, i), r(u.sub.2, i), \dots, r(u.sub.n, i))$, where f can be any extrapolation function known to a person having ordinary skill in the art (e.g., an averaging function); and the similarity distance between users can be computed with the techniques known to persons with ordinary skills in the art, e.g. as a correlation coefficient between two rating vectors (paragraph 0049). Chappell discloses a system and method for assessing business activities wherein the method includes retrieving historical data associated with a business activity (paragraph [0009]. Chappell further discloses that in case of regression analysis, the operator needs to evaluate a resulting correlation coefficient, and determine whether the correlation coefficient indicates that a relationship between two parameters (e.g., sales and pricing) is strong enough to warrant use of a regression model in further analyses (paragraph [0006]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Jaehn et al. to include the feature of Tuzhilin and Chappell in order to utilize historical data for assessing and predicting a future trend in sales.

As for claim 2, Jaehn et al. disclose the method of claim 1, wherein the one or more price affecting factors are comprised of at least one of price, season, cruise itinerary, cruise length, at least one port of call, geographic region, port of embarkation,

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port disembarkation, date of sail, proximity to a holiday, proximity a school break, and ship's age (paragraph [0007]).

As for claim 16, Jaehn et al. disclose a method for evaluating a cruise price being charged by a vendor based on pricing data for a one or more cruises for a period of time comprising:

electronically obtaining pricing data for one or more cruises (paragraph [0002]); and identifying one or more price affecting factors (paragraph [0007]). Jaehn et al. do not disclose creating, using a processor, a regression formula based on the pricing data, where the regression formula is a function of at least one price affecting factor; calculating an expected price of a specific cruise based on the value of at least one price affecting factor of the specific cruise and the regression formula; and comparing the cruise price being charged with the expected price. Tuzhilin et al. disclose that certain customer's preferences for vacation packages may be dependent on the current time of the year or the time of the year that the vacation package is being offered because such a customer may prefer to vacation in the Caribbean in the winter, but not in the summer, or that the Caribbean vacation is only being offered at a low rate in the summer (paragraph 0006); FIG. 4 is an exemplary diagram in which content-based and collaborative-filtering approaches are both used by the system and method of the present invention for providing recommendations/suggestions and to calculate/estimate ratings (paragraph 0026); and when utilized for the users/items example, the collaborative technique can fill-in a ratings diagram 250 (i.e., users vs. items matrix) by estimating a rating $r(u, i)$ which can preferably be performed by locating n users $[u.sub.j]$ who are "similar" to users $[u]$, and by estimating rating $r(u, i)$ as a function $f(r(u.sub.1, i), r(u.sub.2, i), \dots, r(u.sub.n, i))$, where f can be any extrapolation function known to a person having ordinary skill in the art (e.g., an averaging function); and the similarity distance between users can be computed with the techniques known to persons with ordinary skills in the art, e.g. as a correlation coefficient between two rating vectors (paragraph 0049). Chappell discloses a system and method for assessing business activities wherein the method includes retrieving historical data associated with a business activity (paragraph [0009]); . Chappell further discloses that in case of regression analysis, the operator needs to evaluate a resulting correlation coefficient, and determine whether the correlation coefficient indicates that a relationship between two parameters (e.g., sales and pricing) is strong enough to warrant use of a regression model in further analyses (paragraph [0006]); regression determines the amount of influence independent variables have on dependent variables (e.g., sales and advertising), and autoregression determines the amount of impact preceding values have on succeeding values on a single variable (e.g., sales prediction) (paragraph [0029]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Jaehn et al. to include the feature of Tuzhilin and Chappell in order to utilize historical data for assessing and predicting a future trend (expected price) in sales.

2. Claims 3, 17-18 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaehn et al. in view of Tuzhilin et al. (US Pg Pub. 2004/0103092), in further view of Chappell (US PG Pub. 2002/0174005), still in further view of Laufer (US PG Pub 2004/0006507).

As for claim 3, Jaehn et al. does not disclose that the predetermined time for rating a cruise based on pricing data for the cruise is at least one year. Laufer discloses that the hotel/timeshare facility may be land-based or may be sea or air-based as well (paragraph [0049]); "Hotel" as defined herein thus may include a cruise-ship or airline selling cabins or seats for specific cruises or flights (paragraph 0016); and the peak period timeshares may include the right to use during intervals and may be valid for at least three years (paragraph 0016). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made modify the method of Jaehn et al. to include the predetermined time period time of at least one year disclosed in Laufer because the proceeds from early sales may be used to finance the facility (US PG Pub 2004/0006507; paragraph [0038]).

As for claims 17-18 and 20-21, Jaehn et al. disclose the method of claim 16 further comprising the step of displaying the comparison between the cruise price and the expected price in a medium (paragraph [0011]).

Jaehn et al. does not disclose comparing the cruise being charged with the expected price. Laufer et al. disclose that the anticipated occupancy rates are determined using historical occupancy rate information for the area or for a competitive set of facilities in the area (paragraph [0011]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the interactive system Jaehn to include historical data feature used in Laufer to provide the customer with a way to check prices to make sure that the customer is not being overcharged.

3. Claims 4-6 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaehn et al., in view of Tuzhilin et al. (US Pg Pub. 2004/0103092), in view of Chappell (US PG Pub. 2002/0174005), in further view of Laufer, still in further view of Sprenger et al (US PG Pub 2003/0040946).

As for claims 4-5, Jaehn et al. disclose the method of claim 1, further comprising:

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after calculating the cruise rating, comparing the cruise rating for each of the one or more cruises with the pricing data over a period of time (paragraphs [0011] and [0021]).

Jaehn et al. does not disclose identifying one or more additional correlation between the pricing data and at least one price affecting factor; and calculating a new price if the comparison does not exceed a predetermined value. Sprenger et al. disclose that some activities have elements of other components, for example a cruise includes both travel and lodging (paragraph 0003). Sprenger et al. disclose that if the user has chosen a price or price range (i.e. a budget) before reaching the vacation preferences page (or while providing information to such page), the services shown may be determined as services available based on price. Sprenger et al. further disclose that services that are returned by VPS 26 throughout the development of the travel plan that, when selected, exceed the budget, cause VPS 26 to prompt the user to reconsider (for example, to choose another price range or select another service) (Paragraph 0107). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to the modify the interactive interface of Jaehn et al. to include the price threshold feature of Sprenger et al. to provide the user with a range of options appropriate for the user while giving the user the option to change parameters.

As for claim, 6, Jaehn et al. does not disclose determining the average price index for one or more cruise ships. Sprenger et al. disclose that if user 10 is "middle of the road", the average price (of all the services available) is determined, and options for services are shown in order of increasing variance from the average. Sprenger et al. disclose that once user 10 chooses a value for each of the lodging parameters, user 10 will be able to see the services available meeting the values of the parameters by pressing the "Search" button on the "Lodging Preferences" page. For each available service for lodging, in addition to its name, its specifications (such as type, location and average price per night), and total price for the duration of the stay, are displayed on the "Lodging Selection" screen (as seen in FIG. 6) (Paragraph 0266). Therefore, it would have been obvious to modify the Jaehn et al. system to include the average price index feature of Sprenger et al. in order to provide the customer with different ways of comparing prices.

As for claims 10 -14, Jaehn et al does not disclose calculating a daily price for each one or more cruise ships; comparing the daily price; and if the comparison exceeds a predetermined value, calculating a price index of each of the one or more cruises. Tuzhilin et al. disclose certain customer's preferences for vacation packages may be dependent on the current time of the year or the time of the year that the vacation package is being offered because such customer may prefer to vacation in the Caribbean in the winter, but not in the summer, or that the Caribbean vacation is only being offered at a low rate in the summer (paragraph 0006). Tuzhilin et al. further disclose that In particular, when utilized for the users/items example, the collaborative technique can fill-in a ratings diagram 250 (i.e., users vs. items matrix) by estimating a rating $r(u, i)$ which can preferably be performed by locating n users $[u.sub.j]$ who are

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"similar" to users [u'], and by estimating rating $r(u, i)$ as a function $f(r(u.\text{sub}.1, i), r(u.\text{sub}.2, i), \dots, r(u.\text{sub}.n, i))$, where f can be any extrapolation function known to a person having ordinary skill in the art (e.g., an averaging function); and the similarity distance between users can be computed with the techniques known to persons with ordinary skills in the art, e.g. as a correlation coefficient between two rating vectors (paragraph 0049). Tuzhilin et al. still further disclose that FIG. 4 is an exemplary diagram in which content-based and collaborative-filtering approaches are both used by the system and method of the present invention for providing recommendations/suggestions and to calculate/estimate ratings (paragraph 0026). Sprenger et al. disclose that some activities have elements of other components, for example a cruise includes both travel and lodging (paragraph 0003). Sprenger et al. disclose that if the user has chosen a price or price range (i.e. a budget) before reaching the vacation preferences page (or while providing information to such page), the services shown may be determined as services available based on price. Sprenger et al. further disclose that services that are returned by VPS 26 throughout the development of the travel plan that, when selected, exceed the budget, cause VPS 26 to prompt the user to reconsider (for example, to choose another price range or select another service) (Paragraph 0107). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the interactive interface of Jaehn et al. to include the price threshold feature of Sprenger et al. to provide the user with a range of options appropriate for the user while giving the user the option to change parameters.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jaehn et al., in view of Tuzhilin et al. (US Pg Pub. 2004/0103092), in view of Chappell (US PG Pub. 2002/0174005) in further view of Laufer, in further view of Sprenger et al (US PG Pub 2003/0040946), still in further view of Walker et al. (Patent Number 6,134,534).

As for claim 15, Jaehn et al. does not disclose that the predetermined value is a percentage. Walker et al. disclose that if a given CPO includes a customer-defined price of \$140.00, but all other airline-defined restrictions of CPO rule number 45687 are met, a counteroffer should be generated containing a price of \$150.00 since the price variation is within ten percent (10%) of the minimum price associated with CPO rule number 45687, as authorized by counteroffer rule number 45687 col. 17, lines 55-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jaehn et al. to include the percentage feature of Walker et al. in order to provide flexibility in the pricing of cruises.

Conclusion

5. The examiner has cited prior art of interest, for example:

1) Boyd et al. (Patent Number 6,963,854), which disclose a target pricing system.

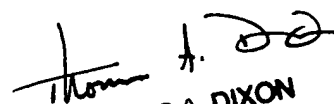
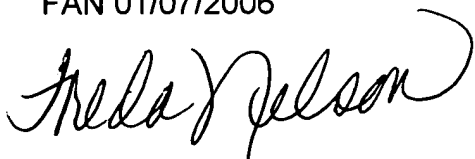
2) Saias et al. (US PG Pub. 2003/0014379), which disclose an adaptive and reliable system and method for operations management.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freda A. Nelson whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday - Friday.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FAN 01/07/2006



THOMAS A. DIXON
PRIMARY EXAMINER